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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/057,406	04/08/98	WERENICZ H	94-36-3-US-D

IM62/0515

HB FULLER CO
3450 LABORE RD
ST PAUL MN 55110

EXAMINER	
AFTERGUT, J	
ART UNIT	**PAPER NUMBER**
1733	16

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/057,406	Applicant(s) WERENICZ ET AL.	
	Examiner Jeff H. Aftergut	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

1)☒ Responsive to communication(s) filed on *03 April 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12 and 33-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 33-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)☐ All b)☐ Some * c)☐ None of the CERTIFIED copies of the priority documents have been:

1.☐ received.

2.☐ received in Application No. (Series Code / Serial Number) _____ .

3.☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

14) ☒ Notice of References Cited (PTO-892)
15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
17) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
18) ☐ Notice of Informal Patent Application (PTO-152)
19) ☐ Other: .

Claim Rejections - 35 USC □ 102/103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 33, 36, and 38 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Boger et al for the same reasons as presented in paper no. 6, paragraph 2.

With regard to applicant's limitation relating to the melted hot melt adhesive, the applicant is advised that the reference suggested that a suitable adhesive material useful in the operation would have included hot melt adhesives, see column 7, lines 30-32. Certainly, one skilled in the art would have expected that a hot melt adhesive would have been applied upon the substrate in a melted state (such is intrinsic in the application of hot melts and is clearly inferred by the name of the adhesive material itself). Additionally, the applicant is advised that one skilled in the art of applying hot melt adhesives would have readily understood that the same would have been applied in a melted state upon the substrate and such is taken as conventional in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the hot melt adhesive upon the substrate in a heated state (melted) using the device of Boger et al to apply a hot melt material as a conformal coating upon a substrate.

Claim Rejections - 35 USC □ 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3-6, 8-12, 33, 35-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanftleben et al in view of Boger et al for the same reasons as expressed in paper no. 6, paragraph 4.

5. Claims 2 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 4 further taken with Reyonlds for the same reasons as expressed in paper no. 6, paragraph 5.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 4 further taken with E.P. 295,694 for the same reasons as expressed in paper no. 6, paragraph 6.

7. Claims 1-6, 8-12, and 33-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cardinal et al (the article submitted by applicant entitiled "A New Cost Effective Method to Confer Tailored Breathability and Liquid Barrier Properties to Nonwovens", newly cited) in view of any one of Skelton et al (newly cited) optionally further taken with Bunnelle et al (newly cited).

The reference to Cardinal et al was request previously in the first Office action as well as the Final rejection in the application originally (prior to the filing of the CPA). The applicant is advised that the reference taught that it was known at the time the invention was made to incorporate a TEEE (Hytrel) extruded plastic film against the back of a nonwoven in order to

impart a desired Breathability properties to the nonwoven in the manufacture of an absorbent article. The reference taught that one would have spaced the slot nozzle through which the continuous film was extruded from the nonwoven and attached the hot extruded Hytrel film to the nonwoven at a roller nip. The reference suggested that thin coating of the film would have been achievable utilizing this processing. The reference failed to refer to the elastomeric TEEE (Hytrel) film as a hot melt material.

However, as evidenced by Skelton, it was known at the time the invention was made that Hytrel plastics were indeed hot melt adhesive materials as evidenced by Skelton. Note that the reference specifically referred to the material as a hot melt, see column 4, line 65-column 5, line15, column 5, lines 45-49, column 6, lines 29-32. Because it was known that the compositions of Hytrel referred to by Cardinal et al were in fact hot melt adhesives, it would have been obvious to utilize the processing of Cardinal et al to laminate a hot melt adhesive onto a nonwoven backing material as the reference to Skelton clearly suggested that the Hytrel material was a hot melt material. While the reference to Skelton suggested that Hytrel was a hot melt material, to further evidence that one skilled in the art would have desired to laminate such elastomeric material subsequent to extrusion directly to a nonwoven web, the reference to Bunnelle et al is cited.

Bunnelle et al taught that it was known at the time the invention was made to extrude a hot melt adhesive composition which was elastomeric and was a block copolymer onto a nonwoven web of material and that the slot nozzle through which the hot melt passed was spaced from the nonwoven, see Figure 2 for example. The reference to Cardinal taught the mixing of

hard and rubbery blocks in the manufacture of the TEEE (Hytrel) materials. Note that Bunnelle et al suggested similar combinations of blocks of hard and rubbery material to make up the block copolymers. Because it was known that Hytrel was a hot melt material as evidenced by Skelton et al and because it was known at the time the invention was made to extrude such hot melt materials from a slot and bond them to a nonwoven as suggested by Bunnelle et al, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the techniques of Cardinal et al to extrude a hot melt coating from a nozzle which was spaced from a nonwoven in order to provide the nonwoven web with the desired breathability properties.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 7 further taken with E.P. 295,694 for the same reasons as expressed in paper no. 6, paragraph 6.

Response to Amendment

9. The declaration under 37 CFR 1.132 filed 11-4-99 is insufficient to overcome the rejection of claims 1-12 and 33-46 based upon the reference to Boger as set forth in the last Office action because: there is no clear nexus between the device tested in the declaration and the device employed by Boger. While the declarant stated that he believed the coating method to be a "Control Coat" operation, a closer examination of the "Control Coat" operation as evidenced by the brochure clearly suggested that the intent of the "Control Coat"operation was to apply a coating of fine fibers of adhesive upon a surface. Boger clearly was not attempting to apply a

fine fiber layer but rather expressed a desire to produce a film upon the surface in the process of applying the conformal coating. The declarant is additionally advised that the reference to Boger suggested that one would have employed a HM640 device in the coating operation. The "Control Coat" operation performed by declarant appeared to have been performed with a CC-220 device (not the same device and therefore not the same process). Note that the reference to Boger would have suggested that the application of the hot melt adhesive would have been upon a circuit board and not upon a porous nonwoven as performed by declarant. Additionally, the claims at hand do not recite the application of the coating upon a porous nonwoven in the independent claims and thus the claims are not commensurate in scope with the declaration. The declaration stated that all of the films were observed to have an "open structure", however it is unclear whether the claimed invention excluded such an open structure and additionally what exactly was meant by "open structure".

The applicant is additionally advised that the Appel et al reference referred to in the response dated 2-14-2000 did not include the shim within the slot nozzle as discussed in Boger et al and as referenced in the advisory action dated 2-18-2000. The reference to Boger et al as discussed at length suggested that the use of the shim was critical in the formation of the film in the operation. The applicant has submitted a new reference (a copy was not provided by applicant in the response dated 4-3-2000), namely 5,421,921 which applicant alleged was a continuation of Boger et al. However, the '921 patent to Gill et al is **not** a continuation of Boger et al but rather issued from serial number 07/910,784 (while Boger et al issued from serial number 07/910,782). The applicant did note that the reference to Gill et al included the shim in

the slot die and that fibers of hot melt adhesive were produced using the same, however the applicant neglected to also note that the reference to Gill et al additionally taught that an impervious film of hot melt adhesive would have been capable of being produced with the slot nozzle including the shim as evidenced at column 2, lines 50-55, column 3, lines 22-30, column 6, lines 39-42, column 6, line 65-column 7, line 1, column 9, lines 8-13 and in particular, column 10, lines 16-24. Clearly, the reference to Gill et al evidenced that the device of Boger et al when using a hot melt adhesive would have been useful for producing a film of the hot melt adhesive and not just a fibrous coating of the hot melt as suggested by applicant.

Response to Arguments

10. Applicant's arguments filed 11-4-99 have been fully considered but they are not persuasive.

As addressed above, the declaration under 35 CFR 1.132 was not persuasive in overcoming the rejection of the prior art of record. Applicant is advised additionally that a declaration under 37 CFR 1.132 cannot be used to overcome a rejection based upon 25 USC 102. Note that one skilled in the art would have been expected to look to Boger as useful techniques for applying conformal coatings upon a substrate. The reference did not expressly state that the hot melt was melted when it was applied, however the application of hot melt adhesives from a die typically included the melting of the adhesive and such was known at the time the invention was made. Additionally, while the reference primarily was concerned with the application of coatings which were conformal and which included epoxies which formed a continuous film as

the solvent evaporated, the reference did expressly state that other coating materials like hot melt adhesives would have been useful in the operation, see column 1, lines 64-65, column 7, lines 30-32. The applicant argues that the reference failed to teach the specific viscosity properties as claimed. It should be noted that those claims which Boger was cited against relating to the coating operation and rejected under 35 USC 102/103 alone did not include any limitation relating to the viscosity of the material being coated upon the substrate. The applicant is advised in this regard that the claims are not commensurate in scope with applicant's arguments. Regarding those claims which do recite the specific viscosity properties, the reference to Sanftleben et al suggested the specific hot melt coating and the properties of the same which would have been useful in a conformal coating operation wherein one did not need to be concerned with volatile emission. The applicant has not addressed the teachings of Sanftleben et al and therefore it is believed that the applicant agrees with the Office interpretation of the same. It should be noted that Sanftleben et al suggested a non-contact extrusion coating operation for application of the hot melt material upon the substrate, see column 15, lines 55-61. The ordinary artisan would have been expected to practice the coating techniques of Boger et al to apply the coatings of Sanftleben et al in light of the clear suggestion to perform the same.

The applicant argued that the claims were limited to just a slot nozzle in that claim 43 now recited that the coating device consisted essentially of a slot nozzle. The applicant is advised that the reference to Boger taught the use of a slot nozzle. While the reference included the impinging air flow streams in the device, these streams were employed to provide one with the ability to shape the start up and shut off of the coating so that sharp coating would have been

provided and good corners. The applicant is advised that it would certainly have been within the purview of the ordinary artisan to eliminate the air streams and the resulting control over the edges of the coatings in the operation of Boger.

Because the applicant has not addressed the teachings of Sanftleben et al, it is believed that the applicant's agree that the reference suggested the use of hot melt coatings for conformal coatings wherein the same had the desired properties relating to the viscosity as claimed. Certainly, one would have been motivated to utilize the conventional non-contact coating operation of Boger in the process of Sanftleben et al to apply the hot melt coating upon a circuit board to provide a conformal coating for the same.

The applicant is advised that the rejection based upon the Cardinal reference has been applied against the claims for the first time herein because applicant never submitted the reference and the reference was not available to the examiner.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Benecke et al is another Nordson patent which suggested that the use of the slot nozzle of Boger et al would have been useful for forming a film of plastic material, see column 9, lines 65-67 and column 10, lines 7-14.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Aftergut whose telephone number is (703) 308-2069.

JHA
May 9, 2000

JEFF AFTERGUT
PRIMARY EXAMINER
ART UNIT 1733